

8 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:266111 CAPLUS

DN 132:278992

TI Method for preparation of optically active acyloxy compounds by asymmetric acylation

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PA Daicel Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

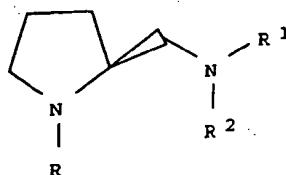
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DT Patent

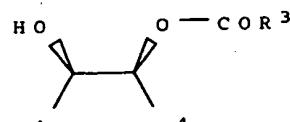
LA Japanese

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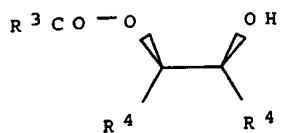
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000117115	A2	20000425	JP 1998-297849	19981020
PRAI	JP 1998-297849			19981020	
OS	CASREACT 132:278992; MARPAT 132:278992				
GI					



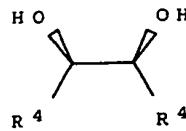
I



II



III



IV

AB A catalyst system for acylation in prepn. of optically active acyloxy(cyclo) alkanols comprises a catalytic amt. of optically active diamine (2-aminomethylpyrrolidine) (I; R = C1-3 linear or branched alkyl; R1 = C1-4 linear or branched alkyl; R2 = CH2Ph; or R and R1 are same or different; R1 and R2 are linked together to form a ring) and tertiary amine and acyl halide represented by formula R3COX (R3 = X = halo; R3 = C1-6 linear or branched alkyl, aryl). Optically active alcs. (II or III; C1-6 linear or branched alkyl or both R4 are same as above; R4 = C1-6 linear or branched alkyl or both R4 are linked to each other to form a ring) are prepnd. by ***selective*** ***acylation*** of one of the HO groups of meso-1,2-diol (IV; R4 = same as above) by the above catalyst system. Thus, a soln. of 306 mg Et3N in 2.5 mL CH2Cl2 and a soln. of 351 mg cis-cyclohexane-1,2-diol in 20 mL CH2Cl2 were added to a mixt. of 400 mg mol. sieve 4A, 3.3 mg (S)-1-methyl-2-[(N-benzyl-N-methyl)aminomethyl]pyrrolidine, and 2.5 mL

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CH₂Cl₂ and cooled to -78.degree., followed by adding a soln. of 636 mg PhCOCl in CH₂Cl₂, and the resulting mixt. was stirred for 3 h and quenched with phosphate buffer (pH 7) to give 83% cis-(+)-2-benzyloxy-1-cyclohexanol (96% ee).

ST optically active acyloxyalkanol prepn; meso diol ***selective***
 acylation ; aminomethylpyrrolidine ***selective***
 acylation catalyst; acyl halide ***selective***
 acylation

IT Acylation
 Acylation catalysts
 (stereoselective; prepn. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

IT 38036-63-4P 72582-15-1P 108592-06-9P
 RL: BYP (Byproduct); PREP (Preparation)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

IT 37854-29-8P
 RL: BYP (Byproduct); SPN (Synthetic preparation); PREP (Preparation)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

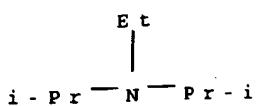
IT 208833-00-5 264122-98-7
 RL: CAT (Catalyst use); USES (Uses)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

IT 79-55-0, 1,2,2,6,6-Pentamethylpiperidine 100-44-7, reactions 121-44-8, Triethylamine, reactions 579-43-1, meso-1,2-Diphenyl-1,2-ethanediol 1792-81-0, cis-Cyclohexane-1,2-diol 5341-95-7, meso-2,3-Butanediol ***7087-68-5***, Diisopropylethylamine ***7175-49-7***, Dicyclohexylethylamine 35583-15-4 65173-64-0, cis-4-Cyclohexene-1,2-diol 264122-97-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

IT 188057-92-3P 202121-52-6P 202121-53-7P 202121-54-8P 264122-95-4P 264122-96-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

IT ***7087-68-5***, Diisopropylethylamine ***7175-49-7***, Dicyclohexylethylamine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prep. of optically active acyloxy(cyclo)alkanols by asym. acylation of meso-1,2-diols in presence of optically active 2-aminomethylpyrrolidine)

RN 7087-68-5 CAPLUS
 CN 2-Propanamine, N-ethyl-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 7175-49-7 CAPLUS
CN Cyclohexanamine, N-cyclohexyl-N-ethyl- (9CI) (CA INDEX NAME)

